

Heat Wave

NOAA NATIONAL WEATHER SERVICE

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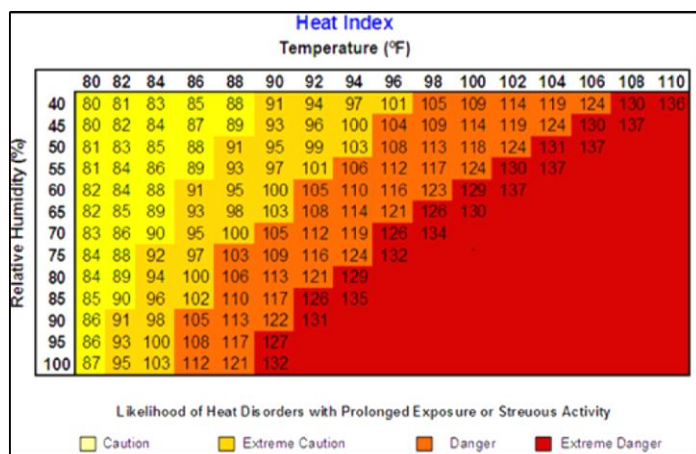
A Silent Killer

In spite of the more widespread use of air conditioning, heat remains one of the top weather-related killers. In the disastrous heat wave of 1980, more than 1,250 people died. In the heat wave of 1995 more than 700 deaths in the Chicago area were attributed to heat. In August 2003, a record heat wave in Europe claimed an estimated 50,000 lives. A heat wave (prolonged period of unusually warm temperatures, often accompanied by high humidity) can last for a few days to a few weeks. The effects of the heat build over time and become more dangerous the longer the heat wave lasts.



Heat Index

The Heat Index (sometimes referred to as the apparent temperature) is a measure of how hot it feels in the shade when the effects of humidity are factored with the actual air temperature. Since heat index values were developed for shady, light wind conditions, *exposure to full sunshine can add up to 15°F to the heat index.*



Heat and Vehicles

Each year many children die from hyperthermia as a result of being left in parked vehicles. Hyperthermia is an acute condition that occurs when the body absorbs more heat than it can dissipate, and it can occur even on a mild day.



Studies show that the temperature inside a parked vehicle can rise rapidly to a dangerous level for children, adults and pets. Leaving the windows slightly open does not significantly decrease the heating rate.

The effects can be more severe on children because their bodies warm at a faster rate than adults.



Effects of Heat

When the heat index exceeds 105°F, the human body begins to lose the ability to cool itself. Children and seniors are often affected at lower heat index values. Some medications and health conditions may also adversely affect the body's ability to handle heat.

Under prolonged exposure to high heat, heat disorders such as heat exhaustion and heat stroke may develop. When the body heats too quickly, or when too much fluid or salt is lost, the body temperature rises and heat-related illness may develop. Heat disorders share one common feature: the individual has been in the heat too long for his or her age and/or physical condition.

Heat Safety

- ★ **Plan ahead.** Reduce, eliminate or reschedule strenuous activities until the coolest time of the day.
- ★ **Keep cool.** During excess heat, spend more time in air-conditioned places. Air conditioning in homes and other buildings markedly reduces danger from the heat. If you do not have an air conditioner, go to a library, store or other location with air conditioning for part of the day.
- ★ **Dress for summer.** Wear lightweight, light-colored clothing to reflect heat and sunlight.
- ★ **Eat less.** Foods such as meat and other proteins increase metabolic heat production and water loss.
- ★ **Stay hydrated.** Drink plenty of water or other non-alcoholic and decaffeinated fluids.
- ★ **Avoid the sun.** Sunburn reduces your body's ability to dissipate heat. To prevent sunburn, use sunscreen.
- ★ **Vehicles are deathtraps.** Never leave children or pets unattended in a vehicle, even with the windows down.
- ★ **Prevent scalding.** Make sure safety seats and belt buckles aren't too hot before securing a child, especially when the car has been parked in the sun.



Heat Disorders

Sunburn

Symptoms: Redness and pain. In severe cases swelling of skin, blisters, fever, headaches.

First Aid: Ointments for mild cases if blisters appear and do not break. If breaking occurs, apply dry sterile dressing. Serious, extensive cases should be seen by a doctor.



Heat Cramps

Symptoms: Painful spasms usually in the muscles of legs and abdomen. Heavy sweating.

First Aid: Apply firm pressure to cramping muscles or try gentle massage to relieve spasm. Give sips of water. If nausea occurs, discontinue water.

Heat Exhaustion

Symptoms: Heavy sweating. Weakness. Cold, pale and clammy skin. Thready pulse. Fainting and vomiting. Normal temperature possible.

First Aid: Get victim out of the sun. Once inside, the person should lie down and loosen clothing. Apply cool, wet cloths. Fan or move victim to air conditioned room. Offer sips of water. If nausea occurs, discontinue water. If vomiting continues, seek immediate medical attention.

Heat Stroke

Symptoms: High body temperature (106° F or higher). Hot dry skin. Rapid and strong pulse. Possible unconsciousness.

First Aid: **HEAT STROKE IS A SEVERE MEDICAL EMERGENCY. SUMMON EMERGENCY MEDICAL ASSISTANCE OR GET THE VICTIM TO A HOSPITAL IMMEDIATELY. DELAY CAN BE FATAL.** While waiting for emergency assistance, move the victim to a cooler environment. Slowly reduce body temperature with cold bath or sponging. Remove clothing. Use fans and air conditioners. If body temperature rises again, repeat process. Do not give fluids.



On the web:

Heat: A Major Killer..... www.weather.gov/om/heat
 National Weather Service..... www.weather.gov
 Red Cross Preparedness..... www.redcross.org